Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A brazing flux for the brazing of individual heat exchanger parts, comprising:

a flux, comprising a base material and nanoparticles,

wherein the flux contains nanoparticles in an amount between 0.01% by volume and 10% by volume, and

wherein the nanoparticles comprise nanoaggregates dispersed in an organic polymer,

wherein the base material used is potassium fluoroaluminates with the empirical formula $K_{1-3}AlF_{4-6}$ or potassium and/or cesium fluorostannates with the empirical formulae $KSnF_3$ and $CsSnF_3$,

wherein a starting material for the nanoparticles is carbon and/or oxides, oxide hydrates, nitrides and/or carbides of transition metals, and/or cerium.

2. (Canceled)

3. (Canceled)

4. (Previously Presented) The flux as claimed in claim 1, wherein a proportion of the organic polymer in the flux after drying is between approximately 0.01% by volume and 10% by volume.

5. (Previously Presented) The flux as claimed in claim 4, in which the organic polymer used is polyurethanes, synthetic resins, phthalates, acrylates, vinyl resins, silicone resins and/or polyolefins.

6. (Cancelled)

7. (Withdrawn) A process for producing the flux as claimed in claim 1, in which nanoparticles are produced by dispersion methods and are added to a base material prior to the brazing process.

8. (Withdrawn – Currently Amended) A process for producing the flux as claimed in claim 1, in which nanoparticles are firstly dispersed in the organic polymer and then added as [[a]] nanopaint to a base material prior to the brazing process.

9. (Withdrawn – Currently Amended) A process for brazing individual heat exchanger parts, comprising brazing [[the]] components with the flux as claimed in claim 1.

10. (Withdrawn – Currently Amended) A process for brazing individual heat exchanger parts, wherein starting materials for nanoparticles are added to a base material prior to the brazing process and nanoparticles which are formed by a chemical reaction during the brazing process are deposited on a surface of the heat exchanger parts [[part]].

11. (Withdrawn – Currently Amended) The process as claimed in claim 10, in which the reaction takes place at a temperature in a range between 350°C and 660°C~~, in particular between 350°C and 600°C,~~ and in a nitrogen atmosphere.

12. (Withdrawn – Currently Amended) The process as claimed in claim 10, in which the starting materials for nanoparticles used are carbon and/or oxides, oxide hydrates, nitrides and/or carbides of aluminum, silicon, boron and/or transition metals, preferably from transition groups IV and V of the periodic system, and/or cerium.

13. (Cancelled)

14. (Withdrawn – Currently Amended) The use of the flux as claimed in claim 1 for producing nanocoated ~~components, in particular~~ heat exchangers, based on aluminum or aluminum alloys for an [[the]] automotive industry.

15. (Previously Presented) The flux as claimed in claim 1, wherein the flux contains nanoparticles in an amount between 0.1% by volume and 1% by volume.

16. (Withdrawn) The flux as claimed in claim 39, wherein the transition metals are transition metals of groups IV and V of the periodic system.

17. (Withdrawn) The flux as claimed in claim 39, wherein the kind of nanoparticle is a nanoscale pigment.

18. (Withdrawn) The flux as claimed in claim 39, wherein the kind of nanoparticle is a nanoaggregate.

19. (Previously Presented) The flux as claimed in claim 39, wherein the kind of nanoparticle is an oxide.

20. (Withdrawn) The flux as claimed in claim 39, wherein the kind of nanoparticle is a nitride.

21. (Withdrawn) The flux as claimed in claim 39, wherein the kind of nanoparticle is a carbide of aluminum, silicon, or boron.

22. (Withdrawn) The flux as claimed in claim 39, wherein the kind of nanoparticle is a transition metal.

23. (Withdrawn) The flux as claimed in claim 22, wherein the transition metal is cerium.

24. (Withdrawn) The flux as claimed in claim 39, wherein the kind of nanoparticle is a carbon nanoparticle.

25. (Withdrawn) The flux as claimed in claim 39, wherein the kind of nanoparticle is a coated nanoparticle.

26. (Withdrawn) The flux as claimed in claim 39, wherein the kind of nanoparticle is a grafted nanoparticle.

27. (Withdrawn) The flux as claimed in claim 1, wherein the nanoparticles improve a resistance to corrosion of a metal component brazed with the flux, as compared to a flux without the nanoparticles.

28. (Withdrawn) The flux as claimed in claim 1, wherein the nanoparticles improve an adhesion of paint of a metal component brazed with the flux, as compared to a flux without the nanoparticles.

29. (Withdrawn) The flux as claimed in claim 1, wherein the nanoparticles reduce an odor of the flux, as compared to a flux without the nanoparticles.

30. (Withdrawn) The flux as claimed in claim 1, wherein the nanoparticles improve a thermal conductivity of the flux, as compared to a flux without the nanoparticles.

31. (Withdrawn) The flux as claimed in claim 1, wherein the nanoparticles improve a water runoff property of a metal component brazed with the flux, as compared to a flux without the nanoparticles.

32. (Withdrawn) The flux as claimed in claim 31, wherein the water runoff property provides a self-cleaning effect for the metal component.

33. (Withdrawn) The flux as claimed in claim 32, wherein the water runoff property further provides a faster drying effect for the metal component.

34. (Withdrawn) The flux as claimed in claim 33, wherein the self-cleaning effect and the faster drying effect minimize the growth of microorganisms on the metal component.

35. (Previously Presented) The flux as claimed in claim 1, wherein the nanoparticles have a diameter of a few nanometers.

36. (Previously Presented) The flux as claimed in claim 1, wherein the nanoparticles have a diameter of 40 to 100 nm.

37. (Withdrawn) The flux as claimed in claim 1, wherein the nanoparticles comprise switchable surfaces.

38. (Withdrawn). The flux as claimed in claim 37, wherein the switchable surfaces are alternatively switchable between hydrophobic surfaces and hydrophilic surfaces.

39. (Previously Presented) The flux as claimed in claim 1, wherein the nanoparticles comprise at least one kind of nanoparticle selected from the group consisting of nanoscale pigments, oxides, oxide hydrates, nitrides, carbides of aluminum, carbides of silicon, carbides of boron, transition metals, carbon nanoparticles, coated nanoparticles, and grafted nanoparticles.

40. (Previously Presented) The flux as claimed in claim 39, wherein the polymer used is polyurethanes, synthetic resins, phthalates, acrylates, vinyl resins, silicone resins and/or polyolefins.

41. (Previously Presented) The flux as claimed in claim 4, wherein the proportion of organic polymer in the flux after drying is between 0.1% by volume and 1% by volume.

42. (New) The flux as claimed in claim 1, wherein the carbide of transition metals is a carbide of a transition metal from groups IV and V of the periodic system.

43. (New) A brazing flux for the brazing of individual heat exchanger parts, comprising:

a flux, comprising a base material and nanoparticles,

wherein the flux contains nanoparticles in an amount between 0.01% by volume and 10% by volume, and

wherein the nanoparticles comprise nanoaggregates dispersed in an organic polymer,

wherein the base material used is potassium fluoroaluminates with the empirical formula $K_{1-3}AlF_{4-6}$ or potassium and/or cesium fluorostannates with the empirical formulae $KSnF_3$ and $CsSnF_3$,

wherein a starting material for the nanoparticles comprise a material selected from the group consisting of oxides, oxide hydrates, carbides of transition metals, and cerium.